

19991003.ba v02\_n688.bam.991003 v02\_n689.bam.991003

>From ???@??? Sun Oct 03 18:37:54 1999  
Message-Id: <199910031600.d93G0c409228@sco.theporch.com>  
Date: Sun, 3 Oct 1999 11:00:00 CDT  
From: Old Tube Radios <boatanchors@theporch.com>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: BOATANCHORS digest 2688

BOATANCHORS Digest 2688

Topics covered in this issue include:

- 1) need SP-600 PS choke  
by "Rodger Singley" <rbsingl@ilstu.edu>
- 2) 874 Tube?  
by "David L. Stinson" <arc5@ix.netcom.com>
- 3) Re: 874 Tube?  
by Henry van Cleef <vancleef@netcom.com>
- 4) Re: RF CHOKES  
by "Arden Allen" <gumbear@pacbell.net>
- 5) Re: 874 Tube?  
by William Donzelli <aw288@osfn.org>
- 6) Stoner SSB, etc F/S  
by mnhopkins@juno.com
- 7) Re: National NCL-2000 color  
by thompson@mindspring.com
- 8) Questions about Utica MC-27  
by "John K9UWA" <k9uwa@cris.com>
- 9) "Fernblatt" FTP mil manual site to go away temporarily....  
by Tom Norris <badger@telalink.net>
- 10) Re: RF CHOKES  
by Scott Robinson <spr@earthlink.net>
- 11) Re: Chokes/the Great Debate  
by Henry van Cleef <vancleef@netcom.com>
- 12) Re: cutting plexiglass tubing  
by Ray Mote <rmote@rain.org>
- 13) Careful!  
by Ralph Parker <rparker@istar.ca>
- 14) Collins 618S-4 Information?  
by Dexter Francis <cwest@xmission.com>
- 15) Re: Collins 618S-4 Information?  
by David Ross <ross@hypertools.com>
- 16) CCA SIGNAL EDITORIAL - READ!!  
by Michael Crestohl <mc@sover.net>

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Message-ID: <002101bf0d32\$b9c84920\$70c0578a@rbsingl>

From: "Rodger Singley" <rbsingl@ilstu.edu>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: need SP-600 PS choke  
Date: Sat, 2 Oct 1999 19:03:28 -0500  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Hi all,

I am restoring an SP-600 which truly came from the barn (even had hay but fortunately no mice or signs thereof). The 20 Henry filter choke has bubbled out its tar and shows about 300K to case. Winding resistance is as marked on case but is difficult/impossible to open and attempt repair as this was a hermetically sealed, welded steel unit. I doubt repair would be successful as the heat was sufficient to blow a plug out of the top and force tar both from the top and bottom through an insulator seal. The power transformer seems to be okay, puts out proper voltage and no unusual heating but I am a bit concerned since it probably took a beating while the choke was burning up. Anyway, if someone has either the choke or a parts unit with the choke, I would like to purchase same. A spare transformer would not be a bad idea either. On the plus side, at least this has all of the proper knobs which is a rarity for me (hint: I still need an NC-400 phasing knob or a similar knob from an NC-300/303).

Thanks!  
Rodger WQ9E

-----  
Message-ID: <37F6A843.1DD4031B@ix.netcom.com>  
Date: Sat, 02 Oct 1999 19:50:12 -0500  
From: "David L. Stinson" <arc5@ix.netcom.com>  
MIME-Version: 1.0  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: 874 Tube?  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Isn't the 874 the regulator tube for the RAK/RAL power supply?

Does anyone have any specs?

73 Dave S.

-----

From: Henry van Cleef <vancleef@netcom.com>  
Message-Id: <199910030059.RAA11376@netcom18.netcom.com>  
Subject: Re: 874 Tube?  
To: Old Tube Radios <boatanchors@theporch.com>  
Date: Sat, 2 Oct 1999 18:59:01 -0600 (MDT)  
Cc: boatanchors@theporch.com  
MIME-Version: 1.0  
Content-Type: text/plain; charset=US-ASCII  
Content-Transfer-Encoding: 7bit

As David L. Stinson discourses

>  
> Isn't the 874 the regulator tube for the RAK/RAL  
> power supply?  
>  
> Does anyone have any specs?

>  
Essentially a 4-pin 0B3 (VR-90). The current spec on the 874 is 10-50  
ma. vs. 10-30 on the 0B3. However, I suspect that both tubes are  
realistically 40 ma. on set warmup (time between an 80 conducting and  
6 volt heater tubes conducting, about 8 seconds), and normal  
operation should be set at 15-25 ma.

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=====  
Hank van Cleef  
=====

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Message-Id: <199910030110.SAA12644@mail-gw2.pacbell.net>  
From: "Arden Allen" <gumbear@pacbell.net>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: RF CHOKES  
Date: Sat, 2 Oct 1999 18:04:58 -0700  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Hi John;

> Re: the recent mini-tempest over RF chokes...I came across the  
following: .....

> .....where theories guiding different aspects of the design are in  
conflict, .....

Theories not well understood, may I add.

> Theory & practise are complementary, not competitive,  
> although, sadly, they may be practised that way.

Part of that comes from egoism. Some of the successful practitioners become convinced others should do it their way and what comes across as 'theory' is really orthodoxy. That's a trap many of us fall into repeatedly.

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

-----  
Date: Sat, 2 Oct 1999 21:18:17 -0400 (EDT)  
From: William Donzelli <aw288@osfn.org>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: 874 Tube?  
Message-ID: <Pine.SUN.3.91-FP.991002211445.12161A-100000@osfn.org>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

> Isn't the 874 the regulator tube for the RAK/RAL  
> power supply?

Yes. Well, the voltage regulator, anyway. In a power supply hooked up to a RAL, an 877 is used as well.

874s are also used in the (much heavier) RAA/RAB power supplies.

William Donzelli  
aw288@osfn.org

-----  
To: Old Tube Radios <boatanchors@theporch.com>  
Date: Sat, 2 Oct 1999 20:15:26 -0500  
Subject: Stoner SSB, etc F/S  
Message-ID: <19991002.201528.-94021.9.MNHopkins@juno.com>  
MIME-Version: 1.0  
Content-Type: text/plain  
Content-Transfer-Encoding: 7bit  
From: mnhopkins@juno.com

Others will chronicle the BA rich Belton, TX hamfest and my thought, that the rigs looked newer than the offerors, might be inappropriate.

But I did find, and buy to add to our collective wisdom:

Stoner, Don, W6TNS, "New Sideband handbook," 232 first edition, 1959  
pages in shelf worn but good condition with the top of the last page

perhaps nibbled by some sideband silverfish. Eddie Middlebrook wrote his name in 18 point script back on 15 April 78 and I don't know where it was for its first 20 years, but you can have it for \$10 which includes the \$3 priority mail fee.

I can send it out as soon as I get the money, which will give me time to copy the long article and diagram of the Globe DSB-100, a forerunner of my Meteor SB-175 CW, AM, DSB TX that I need to sell, too. Other things I'll copy are the Globe Linear diagram and the Eldico stuff.

Eddie also left:

ARRL Hints and Kinks, Vol 9, 1974 with 1 inch tear on cover that needs taping

and

ARRL VHF Manual, 1972, 3d ed, 2d printing, 352 pages.

Either of these will come to you for \$5 which includes the priority mail so, in effect, they are \$2 a piece.

de ab5L, michael in dallas, MNHopkins@JUNO.com  
Student of Tecraft, ICM and Six Meters' Golden age: 1957-58  
Box 226841, Dallas, TX 75222  
Banned for life from QRP-L mailer for various truths.

-----  
From: thompson@mindspring.com  
Message-ID: <001301bf0d43\$61645b00\$6b3056d1@default>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: National NCL-2000 color  
Date: Sat, 2 Oct 1999 22:02:42 -0400

Joe, Dave

The 4CX400 conversion is not a trivial one. George Badger of Svetlana was writing up a piece on what is needed for conversion. He said he was planning an article for the Svetlana web page. The 4CX400 retails for about \$130 I have asked for a short article or disclosure for Electric Radio, too. With your permission I will forward the e-mails to him as a means of spurring him along.

Dave K4JRB

>

> >This one is modified for Svetlana 4CX400's)

>

> You have any information about this mod. I have a NCL-2000 and this seems  
> like one that might be worthwhile someday.

>

-----  
Message-Id: <199910030234.WAA13275@mcfeely.concentric.net>  
From: "John K9UWA" <k9uwa@cris.com>  
To: Old Tube Radios <boatanchors@theporch.com>  
Date: Sat, 2 Oct 1999 21:36:58 -0500  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7BIT  
Subject: Questions about Utica MC-27

Anyone that can help me out a little here??...please an E-Mail ...

A Non-Ham sent me an E-Mail asking if I could tell him if the Utica MC-27 that he now has that belonged to his dad was worth saving or should he just throw it out.....sounds like he is cleaning out an SK's place.....I told him that I wasn't up on Utica enough to give him a good answer but that for some price out there in the world there is someone that would give this thing a home....and that I would ask the Boatanchor guys/gals for a good answer...

I did tell him that a lot depends on condition etc.....  
so anyone tell me what it is and if its worth anything??

Thanks

John K9UWA

John Goller, K9UWA & Jean Goller, N9PXF  
Antique Radio Restorations  
k9uwa@cris.com  
k9uwa@concentric.net

<http://www.concentric.net/~k9uwa/>

-----  
Message-Id: <3.0.5.32.19991002233959.0088a930@mail1.telalink.net>  
Date: Sat, 02 Oct 1999 23:39:59 -0500  
To: Old Tube Radios <boatanchors@theporch.com>  
From: Tom Norris <badger@telalink.net>  
Subject: "Fernblatt" FTP mil manual site to go away temporarily....  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Will be moving the end of the week, and thus the BA mil manuals FTP site will be down. I will not have an ISP in the new location that will allow a full time dialup connection, so am not sure when the site will be back up. Any volunteers for hosting the site? Pretty large collection of PDF files -- the manual for the R-390A is around 40 megs

just by itself.

In the meantime, if anyone needs any of the manuals on the site, they will be available -- the whole site in will be available in fact -- on CD. ( so far, almost two full CDs worth. ) Give me time to get settled in my new digs and email me offlist if you are interested in a copy.

The mil list will still be there, as it is hosted by my ISP. Too bad my ISP wants an arm and a leg to host my almost a gigabyte pdf file collection. :-(

73 all, and sorry for any inconvenience

Tom KA4RKT

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Please visit The Mil List for info on military communications gear:

[HTTP://www.telalink.net/~badger/millist/mi.html](http://www.telalink.net/~badger/millist/mi.html)

Click on the "Online Manuals..." link for a few manuals in PDF format. More to be added as time goes by.

ANY and ALL Contributions Welcome.

\*\*\*\*\*

Tom Norris KA4RKT

badger@telalink.net                      Nashville, Tennessee, USA

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\*\*\*\*\*

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Message-Id: <v03007800b41c56a6caae@[209.178.164.111]>

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

Date: Sat, 2 Oct 1999 17:42:03 -0700

To: Old Tube Radios <boatanchors@theporch.com>

From: Scott Robinson <spr@earthlink.net>

Subject: Re: RF CHOKES

John Sehring wrote:

>

>Re: the recent mini-tempest over RF chokes

>

>Theory & practise are complementary, not competitive, although, sadly, they

>may be practised that way.

AMEN!!

Scott Robinson  
spr@earthlink.net

Junque is GOOD for you!

-----  
From: Henry van Cleef <vancleef@netcom.com>  
Message-Id: <199910030601.XAA06826@netcom8.netcom.com>  
Subject: Re: Chokes/the Great Debate  
To: Old Tube Radios <boatanchors@theporch.com>  
Date: Sun, 3 Oct 1999 00:01:12 -0600 (MDT)  
Cc: boatanchors@theporch.com  
MIME-Version: 1.0  
Content-Type: text/plain; charset=US-ASCII  
Content-Transfer-Encoding: 7bit

As Arden Allen discourses

>  
> Hello Henry;  
>  
> But what I really get out of your piece is that art is determinitive in  
> creating practical solutions to electrical design problems. What I don't  
> get so much of is where and how is art and exact science blended by those  
> who really understand the subjects here, such as yourself. I would like to  
> ask you to elaborate of some of the items that were at issue in the  
> 'debate' we had.

It's a little difficult for me to elaborate on items that were at issue because I think that we are confronting, first of all, a cultural issue. That is, the "American Way of Design" (vs. the "Japanese Way" or the "French Way" or the "Italian Way" or the "German Way"----or even the "Russian Way"). Roughly, and this is an oversimplification, the "American Way" it at one pole. It is to do a few quick approximations of what might be major, or first order, effects and to try to do a simple quantification of those effects. Then do a very quick estimate of the conceptually-negligible second-order effects (the "Jones Factor") which aren't always at all negligible, and then get down to actually cutting metal and trying it out to see how much it needs to be adjusted to make it work properly. Number crunching precision is limited to two significant figures, and estimates to one significant figure. The "Japanese Way is at the other pole; a great deal of time spent on quantifying all of the first



order effects to three significant figures, and second order effects to two significant figures, followed by construction of a prototype that is not a lashup, but looks very much like a finished first-article product. If it doesn't work, then there is a great deal more analysis and calculation before applying corrections, and those corrections are calculated in detail.

Now, all of this leads to a lot of religious beliefs and religious wars, and the products that result from either method can range from "superb" (the American DC-3 airplane and P&W R-2800 engine, or the National HRO, and the Japanese A6M "Zero" and Mitsubishi G4M "Betty" airplanes, all of which were and are "world class winners") to some real clunkers.

My own work experience includes various doses of the "American Way," and I've also worked in a "Japanese Way" environment where the Chief Engineer (and most of the staff) were Japanese, and the General Manager an Italian who told me, "Watch out for X-san (the Chief Engineer). I met him in France, and he could out-French the French." That place really made me clean up my act, and I think it's a shame that engineering schools don't have a 3-hour course in various "Ways." There is some very good literature on the "American Way," notably David Hounshell's studies on the American System of Manufactures, but this is an area that hasn't been considered by enough scholars capable of a good scholarly approach to be well fleshed in. "Research" means actually working as a journeyman engineer (note my use of a trade term here) in several types of environments, which is something most post-doctoral-level people don't try to do while they work their way up the academic ladder. And those of us who don't do the academic ladder generally are more concerned with getting "published" on the shipping dock than writing this stuff up and submitting it to academic journals, particularly when it is a Sociology topic.

What I described earlier about actually designing coils was all "American Way" at its best and worst, but as I pointed out, forty years ago one simply did not have the time and resources to do a lot of detailed calculations. You can read the literature of the day, particularly Terman "Radio Engineering" and "Radio Engineer's Handbook," or Langford-Smith "Radiotron Designer's Handbook," and while they address coil design and construction, they also leave you impressed by the idea that "If you ain't been there, they ain't telling you much."

>

> Speaking of the run-of-the mill plate choke fabrications of the BA era, as  
> you sweep upward in frequency with your bridge what mode of self resonance  
> first exhibits itself, parallel or series? In other words do you have an  
> impedance dip or an impedance extreme? And what typically goes on, with  
> respect to impedance, as you move up in frequency with typical designs, are

> you more plagued by impedance maxima or impedance minima? What factors,  
> you mentioned several, are most difficult to deal with in creating an  
> acceptable plate choke design.

In general, the issue is to get a minimum acceptable impedance across the range of operating frequencies, while keeping DC resistance "acceptably low," whatever you consider that to be. Even a low Q coil that has no distributed capacitance will have a much lower DC resistance than a Z resultant at RF. Distributed capacitance is what needs to be dealt with, and in a multi-pie coil, capacitance between sections coupled with inductance of one section can give a nasty series resonance valley.

Tall skinny pies give minimum self-capacitance for given inductance. Q is modest, but Q is not important here. You want inductive reactance, and that is the same whether the coil has 1 DC ohm or 1000 DC ohms. The one thing you don't want an RF choke to be is an efficient tank circuit. Of course, the wire has to be big enough to handle the DC current. And a severe manufacturing problem arises in that the innermost windings have to be as tightly packed as possible because the windings loosen up as the pie diameter increases and you are limited in how far you can go without having outer turns fall off the pie.

>

> When all is done with, what range of values of loaded (in circuit) Q are  
> typical of a well behaved power amplifier? What are typical values of coil  
> Q over frequency? Assuming controlling Q is important (or is it?) to  
> smoothing out the impedance hills and valleys, what techniques are applied  
> in the fabrication of plate chokes to adjust Q? Effective (skin effect)  
> resistance choices? Winding configurations? Core materials? Wire  
> insulation? Coil dope/varnish? Other methods?

Whew! Lots of questions here. Qualitatively, the high Q needs to be in the tank circuit, and effective Q's of 100 for the tank circuit alone are realistic at 160-10 meters (I am thinking of the Meissner Signal Shifter, which uses shunt fed tank circuits and RF chokes). But when you include tube plate resistance (not terribly high for an 807) and consider that the shunt feed choke (or resistor) are effectively shunting the tank, an in-circuit Q of 10-20 is probably a good number. Using a choke for the shunt feed is treacherous, because you've got phase angles as well as impedance to consider. At parallel resonance (coil shunt capacitance in parallel with coil inductance) you've got an impedance peak and zero phase angle. Below that, you've got inductive reactance; above that, you've got capacitive reactance. All of the questions involve the effects on the tank circuit, and there is a point at which shunting the tank with a capacitance can give a series resonance through that circuit which creates real nasties (parasitics, as well as whopping voltages).

So far as Q in the choke goes, you're not looking at Q-related effects, so there isn't any reason to optimize it. Currents are DC, so you need wire cross-section to handle it. You also need the least number of turns needed to get the inductance, so stay away from fat stuff like Litzendraht, which need more turns because the coupling between turns is poorer. Impregnating varnishes are there to keep moisture out, not to tweak Q, so should not have RF losses (which would shunt coil reactance). Winding configurations? Universal with tall pies is what I've talked about, but a long solenoid works well too, just that getting 2.5 Mh out of a solenoid means a mighty long stick to fit under the chassis and the likelihood of unwanted couplings between the coil and other stuff. Magnetic core "magnifiers" can help a lot, but then you've got to consider how that stuff behaves at 10 meters (lots of losses, not much permeability, in the stuff available in the 40's and 50's; also, lots of temperature issues. Nowadays, there are materials that work nicely, and there are plenty of little chokes that will work into VHF available off the shelf).

I've mentioned the Signal Shifter, which is pretty much a 1940 textbook design. A problem with it is that it attempts to be all things to all people, covering 160-10 meters, which is a 16:1 frequency range. It's a bit nasty to ask one choke to work across that range. 20 and 10 meters are in the range where small solenoids are practical, and in many ways, preferable, because not only can you live with a much lower inductance to get adequate impedance, but you also don't have all those capacitances across sections.

>

> The reason I am asking these questions is not because I want you to favor  
> any of my expressed or unexpressed notions, but because I, among others,  
> would really like to understand much better the subject of RF coils and  
> their application in circuits that we BAists work on in our various repair,  
> restoration and modification endeavors. We have bantered around our  
> various understandings of theory but it is hard to imagine what value  
> theory is when it is both the art and science we need to understand.

I think that everything does have to proceed from a solid understanding of basic physics, particularly what is "inductance," what is "capacitance," and what is "resistance" and how do they play together. Also building some solid skills in doing both DC and AC circuit analysis are important. Looking at a shunt fed plate tank circuit using an RF choke for the feed does require understanding that the choke is supposed to be isolating the power supply, which is "ground" so that it doesn't shunt the tank circuit excessively. AC analysis means understanding that a power supply is "ground" with a DC offset, and Terman uses "ground" without always being clear that this is "AC ground." The ARRL Handbooks of fifty years ago are pretty

light on some aspects of fundamental theory, but I think that to deal with circuit design of fifty years ago, you have to spend some time looking at the models and theory of fifty years ago, which is why I keep pushing Terman's "Radio Engineering." Langford-Smith's stuff is quite good with tons of practical tips, but it is not written for the novice to get maximum benefit from. Terman's stuff on L,R,and C is very good, and while it may seem boring to study chapters that aren't full of practical circuits, if you've got L, R, and C down pat, then the rest of it becomes very easy to follow. Also, if you are going to work for a Japanese Chief Engineer, you're going to need to use them daily.

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=====  
Hank van Cleef  
=====

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Date: Sun, 3 Oct 1999 00:11:42 -0700 (PDT)  
From: Ray Mote <rmote@rain.org>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: cutting plexiglass tubing  
Message-ID: <Pine.SUN.4.05.9910030004330.14724-100000@coyote.rain.org>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

I've had reasonable success with a jeweler's saw (cross between a hacksaw and coping saw) using a blade with teeth running around it in a spiral (at least 40 teeth per inch). Jewelry hobby suppliers (Bourget Brothers in L.A., Rio Grande Traders, etc.) usually carry this sort of thing, as well as the "rockhound" shops. To square up and smooth the edge, I've used a simple disk sander.... but \*very\* gently. Works also with gray pvc rod stock that I use as an "edge tester" on knives.

Ray Mote, K5FKT <rmote@rain.org> Oxnard, CA

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Message-Id: <3.0.5.32.19991003005722.007e9100@istar.ca>  
Date: Sun, 03 Oct 1999 00:57:22 -0700  
To: Old Tube Radios <boatanchors@theporch.com>  
From: Ralph Parker <rparker@istar.ca>  
Subject: Careful!  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

A year or so ago I sent this guy some money for a few manuals. He never sent the publications, and has refused to communicate with me.

VE7XF

At 20:15 10/2/1999 -0500, mnhopkins@juno.com wrote:

>  
>Others will chronicle the BA rich Belton, TX hamfest and my thought, that  
>the rigs looked newer than the offerors, might be inappropriate.  
>  
> But I did find, and buy to add to our collective widsom:  
>  
>Stoner, Don, W6TNS, "New Sideband handbook," 232 first edition, 1959  
>pages in shelf worn but good condidton with the top of the last page  
>perhaps nibbled by some sideband silverfish. Eddie Middlebrook wrote his  
>name in 18 point script back on 15 April 78 and I don't know where it was  
>for its first 20 years, but you can have it for \$10 which includes the \$3  
>priority mail fee.  
>  
> I can send it out as soon as I get the money, which will give me time  
>to copy the long article and diagam of the Globe DSB-100, a forerunner of  
>my Meteor SB-175 CW, AM, DSB TX that I need to sell, too. Other things  
>I'll copy are the Globe Linear diagram and the Eldico stuff.  
>  
>Eddie also left:  
>  
>ARRL Hints and Kinks, Vol 9, 1974 with 1 inch tear on cover that needs  
>taping  
>  
> and  
>  
>ARRL VHF Manual, 1972, 3d ed, 2d printing, 352 pages.  
>  
> Either of these will come to you for \$5 which includes the priortiy  
>mail so, in effect, they are \$2 a piece.  
>  
>de ab5L, michael in dallas, MNHopkins@JUNO.com  
>Student of Tecraft, ICM and Six Meters' Golden age: 1957-58  
>Box 226841, Dallas, TX 75222  
>Banned for life from QRP-L mailer for various truths.

-----  
Message-ID: <37F7675F.663490C7@xmission.com>

Date: Sun, 03 Oct 1999 08:25:37 -0600

From: Dexter Francis <cwest@xmission.com>

MIME-Version: 1.0

To: Old Tube Radios <boatanchors@theporch.com>

Subject: Collins 618S-4 Information?

Content-Type: text/plain; charset=us-ascii; x-mac-type="54455854"; x-mac-creator="4D4F5353"

Content-Transfer-Encoding: 7bit

Greetings all -

Can anyone give me any information on the Collins 618S-4? It appears to be a 200 watt transceiver that was used in commercial aviation. 2 to 30 MHz tuning. AM/SSB.

I'm going to need schematics/pinouts/accessory lists, etc.

-- df

Parts and Tubes for Amateurs, Antiques and Experimenters  
CWest Tube Sales - mail@cwesttubes.com (801) 363-TUBE  
www.xmission.com/~cwest

-----  
Message-Id: <3.0.6.32.19991003080931.007aa260@mail.willapabay.org>  
Date: Sun, 03 Oct 1999 08:09:31 -0700  
To: Old Tube Radios <boatanchors@theporch.com>  
From: David Ross <ross@hypertools.com>  
Subject: Re: Collins 618S-4 Information?  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Dexter & the gang -

At 08:25 AM 10/03/1999 -0600, Dexter Francis wrote:  
>Can anyone give me any information on the Collins 618S-4? It appears to  
>be a 200 watt  
>transceiver that was used in commercial aviation. 2 to 30 MHz tuning.  
>AM/SSB.

Could your radio be related to a 618S-1MC? If so, try Fair Radio Sales. I believe they have info on the ARC-38A, which is a military SSB radio very similar to the 618S-1MC.

The 618S-1MC is a fine piece of Collins clockwork, but it didn't go all the way up to 30 MCs - it stopped around 25 MCs if I remember correctly.

73 and good luck wih it  
Dave Ross N7EPI ross@hypertools.com

-----  
Message-Id: <4.2.0.58.19991003094030.00b4d220@mail.sover.net>  
Date: Sun, 03 Oct 1999 09:46:19 -0400  
To: Old Tube Radios <boatanchors@theporch.com>

From: Michael Crestohl <mc@sover.net>  
Subject: CCA SIGNAL EDITORIAL - READ!!  
Cc: boatanchors@theporch.com, boatanchors@listserv.tempe.gov  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

Hello Gang:

This is the Editorial column from the 3rd Quarter issue of the COLLINS COLLECTORS newsletter THE SIGNAL. I am posting it because I feel it is important for all interested in vintage radio equipment to read it. However as you read it keep in mind that something is presently being done to find out exactly why this is being done and what measures can be taken to stop it.

73,

Michael Crestohl, W1RC/VE2XZ  
Editor, THE SIGNAL

This is the Editorial from the September 1999 issue of  
THE COLLINS COLLECTORS ASSOCIATION newsletter THE SIGNAL.

Don't read this if you have a weak stomach or get upset easily.

Last June 4th and 5th I was at the Rochester (NY) Hamfest which has been an annual haunt of mine for over thirty years. While wandering about in the flea market at 6:00 AM I spotted a pile of RE Collins KWM-2As, 30L-1s, 312B-4s and 516F-2s laying on the ground. They had been unceremoniously and systematically beaten with a small sledge hammer. One of the M-2s had been hit square in the front; another on the top of the slug rack and a third dead on the power amplifier cage. A crowd had gathered and animated negotiations were in progress. Hmmm, yeah, I want one too! In and amidst the confusion one fellow pulled a wad of cash from his pocket and managed to convince the overwhelmed and slightly befuddled seller to give them all to him for the proffered sum which I found out later was \$700.00.

As the lucky buyer busied himself carrying away his trophies I took a closer look at these unfortunate radios. Most of the KWM-2As had sustained direct blows to the slug rack, PTO assemblies as well as the power amplifier cage. I figure he'd be able to make a couple of workable units out of the lot - but with a lot of time and effort. Whatever the case they'd be good for parts if nothing else. I offered to buy one of each unit from him but he wasn't interested in selling anything there and then. He beat a hasty retreat and kept a low profile for the rest of the flea market as I suspect he didn't want to discuss anything with anybody.

After the crowd had dispersed, grumbling about the guy who "bought them

all", I wandered back to have a chat with the seller. He was unloading more stuff and I spotted a lone 516F-2 supply that had taken a couple of whacks and had its' cords cut. He wanted \$20.00 for it. So at least I got something! I asked him where he had come across this pile and he told me he got them from somebody who works at the Tobyhanna Army Depot in PA. Tobyhanna is a storage and repair facility for electronic equipment well known to many hams in this part of the country. Their DRMO sales sheets used to feature lots consisting of nice R-390As, KWM-2As, even cool spy radio sets like the RS-1 and RS-6, M-209 crypto machines and other very neat things. A lot of us got great things from Tobyhanna. However for reasons unknown in the past couple of years the government in its' infinite wisdom has decided it is better to "demilitarize" all radio equipment lest it fall into the hands of enemies and terrorists. I'd heard about this independently from Mike Baranowsky and Jim Williams, both surplus equipment merchants and good guys to deal with. In past years they both had overflowing tables at Dayton but in recent years pickings were slim. This power supply is visual evidence of that policy.

Whoever swung the hammer either wasn't very capable or intelligent about doing his dastardly work. The only damage the unit sustained was a crumpled bleeder resistor cage and one of the bells on the small choke that sits behind the two rectifier tubes was dented. The two tube bases were still in their sockets but the tubes were obviously smashed to smithereens in the attack. From looking at this unit I am guessing that it was in very clean condition until the day came for its' execution when it was casually piled up with other unfortunates to be "demilled". It probably spent most of its' working life on some military base or perhaps in an embassy somewhere. Judging from the heat marks above the rectifier tubes it had seen little use. The cabinet had a few scratches but no dents. There was little dust on the chassis. I jury-rigged a power cord and plugged in two new rectifiers and, you guessed it, the supply worked perfectly. When I get time I'll make up a new cable set and I'll have a nice spare 516F-2 supply for \$20.00 and a few hours work.

Who can figure the mind of a bureaucrat? What possible justification can there be for this desecration of this fine equipment? It cannot be for security reasons, or can it? This equipment was freely available back in the 1950s and 60s and the stuff never was classified. Today anyone can buy a much more modern compact HF radio set on the open market so keeping it out of evil hands surely cannot have any validity. It just strikes me that the authorities responsible for getting rid of unwanted and unneeded equipment are just too lazy to go through all the steps required by law to sell it. In other words it's just easier to smash the stuff. What an outrage!

I have written to Senator Leahy (D-VT) asking him to look into this. Sen. Leahy is no real friend of radio enthusiasts (remember the ECPA of 1986!) but he was seen publicly after the terrible Ice Storm of 1998 lauding and thanking the radio amateurs here in VT for their fine work providing



communications during the long emergency. In addition I have also contacted the Public Affairs Officer at the D.R.M.S. (the government agency responsible for disposing materiel that is no longer needed). We had a long talk (on Uncle Sam's nickel!) and I explained the situation to her and I believe she understood what I was saying. She said she'd look into it and let me know the rational and reason behind this outrageous policy. I told her I see no reason why this equipment cannot be given to us hams so we might have it available for future emergencies. It's much better than the alternative!

If this editorial outrages and angers you too - good! That's what it is intended to do. Write your elected officials (at least the ones that can read) and ask them why this is being done? Demand an answer. Next year is an election year and many of these bozos are now thinking about getting themselves re-elected so some of them may actually be responsive. Emphasize the public service and emergency preparedness aspect of our hobby. I don't hold out much hope, friends, but we can't just sit there and let our beloved radios be violated and desecrated under a moronic government policy that makes absolutely no sense to any thinking person, Collins radio enthusiast or not!

As my good friend Tim Smith WA1HLR would say "I'm just so yellified....I just don't know!"

Copyright 1999  
Michael Crestohl,  
W1RC/VE2XZ  
Editor, THE SIGNAL

Cordially,

Michael Crestohl  
mc@sover.net

-----  
End of BOATANCHORS Digest 2688  
\*\*\*\*\*

>From ???@??? Mon Oct 04 01:34:31 1999  
Message-Id: <199910040431.d944VD404999@sco.theporch.com>  
Date: Sun, 3 Oct 1999 23:30:44 CDT  
From: Old Tube Radios <boatanchors@theporch.com>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: BOATANCHORS digest 2689

## BOATANCHORS Digest 2689

Topics covered in this issue include:

- 1) RE: "Fernblatt" FTP mil manual site to go away temporarily....  
by "Bill Hawkins" <bill@iaxs.net>
- 2) B & W 370-15 Balun  
by "Paul Bernhard Sr." <w2tu@email.msn.com>
- 3) Negative Lead Choke Question  
by AA5QT@aol.com
- 4) Re: Cutting Large Plexiglass Tubing  
by "Steve" <scb@loki.internettport.net>
- 5) Re: cutting plexiglass tubing  
by Scott Robinson <spr@earthlink.net>
- 6) Re: Careful!  
by "Joe Spencer" <KK5NA@quadj.com>
- 7) FREE Tek 561 scope, pickup only, this week only  
by Tom Norris <badger@telalink.net>
- 8) Re: Chokes/the Great Debate  
by "Arden Allen" <gumbear@pacbell.net>
- 9) Re: Careful!  
by "Ray A. Allen, Sr." <w2kbr@pcbank.net>
- 10) f/s HALLICRAFTERS S-120 BEST OFF  
by "Brian.S.Allen" <HP7093@mf-isd.aoc.state.nc.us>
- 11) FOR SALE  
by dick a george <k6kwq@juno.com>
- 12) Negative Lead Choke Question.  
by "Richard Brunner" <rbrunner@gis.net>
- 13) Lysco help - and that 0Z3...  
by MODSTEPH@ACS.EKU.EDU
- 14) Re: need SP-600 PS choke  
by "Benjamin D. Hall" <kd5byb@WT.NET>
- 15) Re: Lysco help - and that 0Z3...  
by john <johnmb@mindspring.com>
- 16) NEED COPY OF OLD QST ARTICLE  
by JOHN\_SEHRING.parti@ecunet.org (JOHN SEHRING)
- 17) Belton impressions  
by "Benjamin D. Hall" <kd5byb@WT.NET>
- 18) re: Belton impressions  
by Jim Coe <jcoeb@brightok.net>
- 19) Ozone was Re: Marconi  
by "Barry L. Ornitz" <ornitz@tricon.net>
- 20) Re: Ozone was Re: Marconi  
by "Mike Feher" <n4fs@monmouth.com>
- 21) Re: Ozone was Re: Marconi  
by "Barry L. Ornitz" <ornitz@tricon.net>
- 22) Re: Ozone was Re: Marconi  
by "Arden Allen" <gumbear@pacbell.net>

-----  
From: "Bill Hawkins" <bill@iaxs.net>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: RE: "Fernblatt" FTP mil manual site to go away temporarily....  
Date: Sun, 3 Oct 1999 11:52:07 -0500  
Message-ID: <000001bf0dbf\$a153c6c0\$0b0aa8c0@Normandale.bvc.frco.com>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Tom,

This change might be a good deal for you. A gigabyte of info is a bit much to be perused by modem, never mind stored on an ISP's disk, where space is measured in 5 meg increments. I'd prefer to have that info on CDs where I can search at my leisure. But even though you love the hobby, don't give them away at cost. I'd pay at least \$10 per CD, probably not as much as \$30. Each pair of CDs sold pays a month of rent on the ISP, where the web site lists the contents of the CDs and how to get them. You could apply the Rules of Ware, especially the part about good stories, to reduce the price for individuals that can't stand it.

Please add me to your list of prospective buyers.

Bill Hawkins  
bill@iaxs.net

-----  
Message-ID: <001001bf0dc3\$63e1f600\$0fcb0a3f@default>  
From: "Paul Bernhard Sr." <w2tu@email.msn.com>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: B & W 370-15 Balun  
Date: Sun, 3 Oct 1999 13:19:01 -0400

I have an extra BW 370-15 balun that is used with my BW folded dipole. I know the input is 50ohms but wonder what the output impedance matches? (probably 300 if the dipole is conventional)

I would like to use it to feed 450 ohm ladder to a center-fed zep. Would it be useful for that?

Also another antenna question - I am now feeding the zepp with ladder line directly from the tuner. I would like to relocate the tuner to another spot that would be inconvenient to run the ladder to. If I ran 50 ohm coax outside to a balun and then 450 to the antenna, how would this affect the tuning of the antenna? At the present it is working very nicely on all bands.

Tnx for the help - it's been a long time since I have played with antennas.  
(20 years of tower, tribander and inverted v's!)

Paul B. W2TU

-----  
From: AA5QT@aol.com  
Message-ID: <68921827.2528fae7@aol.com>  
Date: Sun, 3 Oct 1999 14:31:03 EDT  
Subject: Negative Lead Choke Question  
To: Old Tube Radios <boatanchors@theporch.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: 7bit

Hello to all.

I'm building a HV (1600 VDC) power supply, using a full wave bridge rectifier  
(4 HV diodes). I'd like to put a choke between the negative diode leads  
(which would normally be grounded) and ground.

Anyone ever done this? It seems like it be would be akin to other types of  
negative lead filtering, such as placing the choke at the transformer center  
tap of a full wave circuit.

73,  
Gary K5QT

-----  
Message-Id: <199910031857.NAA15567@loki.internettport.net>  
From: "Steve" <scb@loki.internettport.net>  
To: Old Tube Radios <boatanchors@theporch.com>  
Date: Sun, 3 Oct 1999 13:40:39 +0000  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7BIT  
Subject: Re: Cutting Large Plexiglass Tubing  
CC: boatanchors@theporch.com, homebrew@qth.net

Greetings;

Hobby shops sell a device called a "Snapsaw", a sort of cross  
between a saw and a really sharp thin blade knife. Everyone should have  
one of these!

Regards; Steve

-----  
Message-Id: <v03007800b41d5f13dd81@[209.178.165.199]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Date: Sun, 3 Oct 1999 12:30:19 -0700  
To: Old Tube Radios <boatanchors@theporch.com>  
From: Scott Robinson <spr@earthlink.net>  
Subject: Re: cutting plexiglass tubing

>I've had reasonable success with a jeweler's saw (cross between a  
>hacksaw and coping saw) using a blade with teeth running around it in a  
>spiral (at least 40 teeth per inch). Jewelry hobby suppliers (Bourget  
>Brothers in L.A., Rio Grande Traders, etc.) usually carry this sort of  
>thing, as well as the "rockhound" shops. To square up and smooth the  
>edge, I've used a simple disk sander.... but \*very\* gently. Works also  
>with gray pvc rod stock that I use as an "edge tester" on knives.  
>  
>Ray Mote, K5FKT <rmote@rain.org> Oxnard, CA

and Scott adds:

Mining and Lapidary, a rock-hound shop in San Francisco, is another likely source of such a saw.

Regards,

Scott Robinson  
spr@earthlink.net

Junque is GOOD for you!

-----  
Message-ID: <015f01bf0dda\$98981ac0\$a200430a@vectra>  
From: "Joe Spencer" <KK5NA@quadj.com>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: Careful!  
Date: Sun, 3 Oct 1999 15:05:08 -0500  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Ralph et al,

I have known Michael for several years and have bought and traded many manuals and pieces of equipment with him and never have I come away on the short end. So for what it is worth I would say he is a good source of information and materials.

Joe KK5NA

----- Original Message -----

From: Ralph Parker <rparker@istar.ca>

To: Old Tube Radios <boatanchors@theporch.com>

Sent: Sunday, October 03, 1999 02:57

Subject: Careful!

> A year or so ago I sent this guy some money for a few manuals. He never  
> sent the publications, and has refused to communicate with me.

> VE7XF

>

> At 20:15 10/2/1999 -0500, mnhopkins@juno.com wrote:

> >

> >Others will chronicle the BA rich Belton, TX hamfest and my thought, that  
> >the rigs looked newer than the offerors, might be inappropriate.

> >

> > But I did find, and buy to add to our collective wisdom:

> >

> >Stoner, Don, W6TNS, "New Sideband handbook," 232 first edition, 1959

> >pages in shelf worn but good condition with the top of the last page

> >perhaps nibbled by some sideband silverfish. Eddie Middlebrook wrote his

> >name in 18 point script back on 15 April 78 and I don't know where it was

> >for its first 20 years, but you can have it for \$10 which includes the \$3

> >priority mail fee.

> >

> > I can send it out as soon as I get the money, which will give me time

> >to copy the long article and diagram of the Globe DSB-100, a forerunner of

> >my Meteor SB-175 CW, AM, DSB TX that I need to sell, too. Other things

> >I'll copy are the Globe Linear diagram and the Eldico stuff.

> >

> >Eddie also left:

> >

> >ARRL Hints and Kinks, Vol 9, 1974 with 1 inch tear on cover that needs

> >taping

> >

> > and

> >

> >ARRL VHF Manual, 1972, 3d ed, 2d printing, 352 pages.

> >

> > Either of these will come to you for \$5 which includes the priority  
> >mail so, in effect, they are \$2 a piece.  
> >  
> >de ab5L, michael in dallas, MNHopkins@JUNO.com  
> >Student of Tecraft, ICM and Six Meters' Golden age: 1957-58  
> >Box 226841, Dallas, TX 75222  
> >Banned for life from QRP-L mailer for various truths.  
>  
>

-----  
Message-Id: <3.0.5.32.19991003150724.008e5250@mail1.telalink.net>  
Date: Sun, 03 Oct 1999 15:07:24 -0500  
To: Old Tube Radios <boatanchors@theporch.com>  
From: Tom Norris <badger@telalink.net>  
Subject: FREE Tek 561 scope, pickup only, this week only  
Cc: boatanchors@qth.net, BOATANCHORS@LISTSERV.TEMPE.GOV  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Have a Tek 561 scope. Works, sort of -- the HV transformer has developed an arc, and it no longer has HV. Good for parts or tubes. PICK UP ONLY - THIS WEEK ONLY Nashville Tennessee. I hate to see it go to parts, but I really don't want to pack it for the move next weekend.

Tom KA4RKT

-----  
Message-Id: <199910032150.0AA26385@mail-gw5.pacbell.net>  
From: "Arden Allen" <gumbear@pacbell.net>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: Chokes/the Great Debate  
Date: Sun, 3 Oct 1999 14:34:10 -0700  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Hi again Hank;

> It's a little difficult for me to elaborate on items that were at  
> issue because I think that we are confronting, first of all, a  
> cultural issue. ....

Yes, and we have sub-cultures here on the list to contend with. To be, or not to be.....disciplined. Computers are our task masters now, not the "Chief".

You've given me a "calibration" on the subject of RF plate chokes. I'm now

primed to do some study of coils using my Q meter and RX bridge. They've been gathering dust up until now. I'll post some results in time. Thanks for the additional insights.

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

-----  
Message-ID: <37F7D2D4.5E0B3426@pcbank.net>  
Date: Sun, 03 Oct 1999 18:04:04 -0400  
From: "Ray A. Allen, Sr." <w2kbr@pcbank.net>  
MIME-Version: 1.0  
To: Old Tube Radios <boatanchors@theporch.com>  
CC: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: Careful!  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Ralph,

I have to agree with Joe. I've also had some tradin with Michael and have found him to be very fair.

I wud say that either the stuff got lost, or maybe he just forgot about it, but I think I wud go with the former rather than the latter. I wud be greatly surprised if Michael wud not work with you on those items..

es 73 ray

--

\*\*\*\*\*  
Ray A. Allen, Sr., W2KBR/3, AC98-00775, FM19qc  
8303 Grainfield Rd., Severn,  
Anne Arundel County, MD, 21144-2331  
\*\*\*\*\*

-----  
Message-Id: <199910032315.d93NFL423318@sco.theporch.com>  
Date: Sun, 3 Oct 99 19:44:24 EDT  
To: Old Tube Radios <boatanchors@theporch.com>  
From: "Brian.S.Allen" <HP7093@mf-isd.aoc.state.nc.us>  
Subject: f/s HALLICRAFTERS S-120 BEST OFF

HALLICRAFTERS S-120, GOOD CONDITION, MISSING 4TH KNOB FROM THE LEFT.  
HAS NOT BEEN CUT ON IN YEARS. WORKED LAST TIME USED.

BEST OFFER

MY FRIEND WANTED ME TO POST THIS. HE IS NOT INTO HAM RADIO AND WANTS TO GET RID OF IT.



BRIAN KB4MNG

-----  
To: Old Tube Radios <boatanchors@theporch.com>  
Date: Sun, 3 Oct 1999 16:15:14 -0700  
Subject: FOR SALE  
Message-ID: <19991003.161740.-102041.0.K6KWQ@juno.com>  
MIME-Version: 1.0  
Content-Type: text/plain  
Content-Transfer-Encoding: 7bit  
From: dick a george <k6kwq@juno.com>

FOR SALE

IC-471A 432/450 almode transceiver,  
with Manual, (Work and looks Great). \$495. Qty. 1

4-1000, Eimac RF Tubes, (Pulls un-tested, clean), \$80. ea., Qty. 2  
4-1000, Eimac RF Tubes, (Pulls un-tested, slightly yellowed), \$45. ea.,  
Qty. 1

4CX1000A, Eimac RF Tubes, (Pulls Tested w/full out put), \$80. ea., Qty. 3  
4CX1000A, Eimac RF Tubes, (Pulls un-tested discolored), \$20. ea., Qty. 1

4CX250/B, Eimac RF Tube w/ chiminey & socket, (Pulls un-tested), \$40.  
ea.,  
Qty. 1

8295A, Eimac RF Tubes, (Pulls Tested w/full out put), \$100. ea., Qty. 2

Y-574, Eimac RF Tube, (Pulls un-tested), \$85. ea., Qty. 1

S2001A, Vacuum tubes, (Pulls un-tested), \$10. Ea., Qty. 2

SK-506, Eimac Chimney for 4-1000, \$50. Qty. 1

Force air porcelain chimney w/airflow switch, Grid ring and Porcelain  
socket,  
for Y574 tube. \$50. Qty. 1

SK-800A, Eimac, (for 4CX100/1500), \$50. Qty. 1

4-1000 Filament Transformer, Chicago Standard #F-752 Pri.110/220, Sec.  
7.5v

@ 25 amp., \$50. Qty. 1

2.3 GHz. RF amp. cavity kit, GrantsPass, \$10. Qty. 1

HF Vertical ground plan, (new// un-opened kit, (5 insulators w/ copper wire).  
\$15. Qty. 1

AEA Computer Patch interface, (no manual), \$20. Qty. 1

TR-7600/7625, Kenwood, Operating/Manual, best offer.

AT-250, Kenwood, Automatic Antenna Tuner, Operating/Manual, best offer.

FT-757GX, Yaesu, Operating manual, (copy), best offer.

Contact Jim, W20DH/6  
wb2odhjim@aol.com

---

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---

Message-ID: <003f01bf0df8\$5c05d5c0\$011e29d8@blah>  
From: "Richard Brunner" <rbrunner@gis.net>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Negative Lead Choke Question.  
Date: Sun, 3 Oct 1999 19:32:58 -0400  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

It works fine with a bridge rectifier, exactly the same as with full-wave rectification. The only difference is with the bridge; the whole transformer winding is used each half-cycle, whereas with full-wave rectification, half the transformer winding is used each half-cycle. This is irrelevant to the filter. I have done this many times - and it works fine.

Richard Brunner, AA1P, rbrunner@gis.net

---

Date: Sun, 03 Oct 1999 19:52:03 -0400 (EDT)  
From: MODSTEPH@ACS.EKU.EDU  
Subject: Lysco help - and that 0Z3...

To: Old Tube Radios <boatanchors@theporch.com>  
Message-id: <01JGPJN1GNC8001XL6@ACS.EKU.EDU>  
MIME-version: 1.0  
Content-type: TEXT/PLAIN; CHARSET=US-ASCII

How 'bout that!

It would appear that the number on the "0Z3" had been smeared slightly. Well, it LOOKS like it says "0Z3!" Checking the base pins, it could be an 0D3, which would make sense (being the type needed), so I plugged it into the tube tester, configured it for 0D3, and it tested just fine - purple glow and all.

With that taken care of (but it WAS an interesting thread, finding out about the 0Z3, for which there is "No Known Use) I got back into the Lysco 600... I performed Uncle Marty's Famous Capacitor Revival procedure on the filters, and in the process found a fair amount of wiring different from the schematic I have - and a few different parts too. I'd guess they were substitutes as something stopped working, and considered starting to re-wire along the lines of the schematic I have (dated 1950), a "recent" Lysco 600 with the TVI filter installed, and have some real questions if anyone out there is knowledgeable of the critter. Specifically, starting with the two 68k bleeder resistors which do not go directly to ground, e.g. (and where I have a 20 watt resistor to ground instead, at about half of the schematic resistance, obviously put in as a replacement).

So I stopped ovrking on it - but decided "What the heck!" and tied on an antenna and fired it up. Using a crystal rather than the VFO I was putting out 20 watts and got a nice signal report from near Buffalo, NY  
(Kentucky to NY) on 40 meters.

Pete wondered why I was not using the VFO (he at least knew of a Lysco), so I switched over and used the VFO... His report: chirp about 200 kHz wide. Not bad, considering its age and one of the 6AG7's being a little weak - plus what changes have been done.

So - any ideas on how many different models of the Lysco 600 (with TVI filter) were done, or if what I have are recommended mods rather than "stick in something to make it work?"

TIA

73, Al N5AIT

-----  
Message-Id: <3.0.32.19991003185058.007e0210@mail.wt.net>  
Date: Sun, 03 Oct 1999 18:53:48 -0500  
To: Old Tube Radios <boatanchors@theporch.com>  
From: "Benjamin D. Hall" <kd5byb@WT.NET>  
Subject: Re: need SP-600 PS choke  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

>fortunately no mice or signs thereof). The 20 Henry filter choke has  
>bubbled out its tar and shows about 300K to case. Winding resistance is

Hi Rodger and list...

I don't know if this is an option given the current state of your choke,  
but I've read that these chokes are one of the weak links in the SP-600.

Seems that after time, the tar inside isn't much of an insulator... I've  
read of people re-mounting them as to insulate the body of the choke from  
ground, thus fixing the problem. I haven't done it to either of mine, yet.

Thanks and 73,  
Ben

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Benjamin D. Hall, KD5BYB, Engine and radio collector / operator.  
Located in Houston, Texas, USA.  
e-mail: kd5byb@WT.net, web: <http://web.wt.net/~kd5byb/>  
"An ye harm none, do what thou wilt."

-----  
Message-Id: <3.0.3.32.19991003200152.00ce1068@mindspring.com>  
Date: Sun, 03 Oct 1999 20:01:52 -0400  
To: Old Tube Radios <boatanchors@theporch.com>  
From: john <johnmb@mindspring.com>  
Subject: Re: Lysco help - and that 0Z3...  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

At 07:52 PM 10/03/1999 -0400, MODSTEPH@ACS.EKU.EDU wrote:  
>I have (dated 1950), a "recent" Lysco 600 with the TVI filter  
>installed, and have some real questions if anyone out there is  
>knowledgeable of the critter. Specifically, starting with the  
>two 68k bleeder resistors which do not go directly to ground,

Hi Al,

Well, those two bleeders go to ground through the 1250 ohm resistor at the

key jack , no?

My "Manual" is dated march 30 1950, and is for the 500 and 600.  
You're welcome to a copy if its helpful. My lasting impressions of this  
rig is the final that's under the chassis, and the B+ that's exposed  
along the back chassis (no groping for antenna connector with THIS bad boy)  
with no apparent cover!

Neat old rig!  
John

-----  
MIME-Version: 1.0  
Content-Type: text/plain; charset="US-ASCII"  
Content-Transfer-Encoding: 7bit  
Date: Sun, 3 Oct 1999 20:07:59 -0400 (EDT)  
Subject: NEED COPY OF OLD QST ARTICLE  
To: Old Tube Radios <boatanchors@theporch.com>  
From: JOHN\_SEHRING.parti@ecunet.org (JOHN SEHRING)  
Message-ID: <9910032008.aa00479@pcusa01.ecunet.org>

To: boatanchors@theporch.com

I need someone to copy an article from an old QST.

It's October 1973, "Another Look at Reflections", Part IV by Walt Maxwell.  
The usual remuneration applies. Thanks.

-John Sehring (Sun, Oct 3, 1999 Custer SD USA) UCC WB0EQ

-----  
Message-Id: <3.0.32.19991003193619.00828860@mail.wt.net>  
Date: Sun, 03 Oct 1999 19:36:24 -0500  
To: Old Tube Radios <boatanchors@theporch.com>  
From: "Benjamin D. Hall" <kd5byb@WT.NET>  
Subject: Belton impressions  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Greetings all...

Got home late this morning from Belton. After finding out that Belton was  
this weekend late Friday afternoon, the wife and I loaded the truck up and  
drove all night, getting into Belton about 4:30 am after a disgusting  
breakfast at Denny's in Temple. (don't ask)

I was pretty happy with the variety of stuff - I saw a lot of Hallicrafters  
stuff, some military, but little National equipment, which I have been

hunting lately... As always, Belton had a really good atmosphere - the people were really friendly and nice to talk to. Didn't do too well selling, and cannot really understand why. Anyone else notice the same thing? Was attendance down?

Saw many BA'ers there - too many to remember so I won't even try! Next time I think I'm going to keep track...

Looking forward to hearing other's reports...

Thanks and 73,  
Ben

---

Benjamin D. Hall, KD5BYB, Engine and radio collector / operator.  
Located in Houston, Texas, USA.  
e-mail: kd5byb@WT.net, web: <http://web.wt.net/~kd5byb/>  
"An ye harm none, do what thou wilt."

-----  
Message-Id: <199910040113.UAA06384@boomer.brightok.net>  
Date: Sun, 03 Oct 1999 20:08:47 -0500  
To: Old Tube Radios <boatanchors@theporch.com>  
From: Jim Coe <jcoe@brightok.net>  
Subject: re: Belton impressions  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Ben kd5byb wrote:

>I was pretty happy with the variety of stuff - I saw a lot of Hallicrafters  
>stuff, some military, but little National equipment, which I have been  
>hunting lately... As always, Belton had a really good atmosphere - the  
>people were really friendly and nice to talk to. Didn't do too well  
>selling, and cannot really understand why. Anyone else notice the same  
>thing? Was attendance down?

I agree with Ben that the crowd and organizers were friendly as usual.  
I also noticed less buying than the last three fests, but I did not get  
the impression that attendance was down. I did notice more outside  
sellers and it seemed a lot of potential buyers spent most of the day  
outside after a quick tour through the dome. Weather was great and  
probably an influence.

Ben and I were side by side in the dome and saw the same crowd. Phil  
Mills was just down the aisle and seemed to move a good amount of  
his junque. Charles Hugg moved a lot of his stuff.....to me.... :-)

Good time was had anyway and will be there next spring, Lord willing.

73's.....Jim

Jim Coe W5JI           Hollowstaters should never tell their  
Davis, OK 73030       paramours that the glow in their  
QCWA, Extra           eyes remind them of a favorite radio!

-----  
Message-Id: <199910040225.WAA15703@flash.naxs.net>  
From: "Barry L. Ornitz" <ornitz@tricon.net>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Ozone    was Re: Marconi  
Date: Sun, 3 Oct 1999 23:20:36 -0400

Mike Feher wrote:

>I suppose this is in the same category as saying salt is bad for  
>you since after feeding 1000 pounds of it to a rat the rat died.  
>I knew and still know a lot of "sparks" who lived to be a ripe  
>old age sniffing ozone all day. I had a demonstration that  
>lasted two hours with intermittent keying. Let's keep things in  
>perspective. You should work for the US government, HI. Help  
>us protect ourselves due to our lack of intelligence. 73 - Mike

Fortunately we have learned many things about the dangerous nature of chemicals we once thought were harmless. Downplaying the dangers without factual information is foolish. The dangers of ozone have been written about before in this group. But to add some detail, the following quote from NIOSH (National Institute of Occupational Safety and Health) may help. Note that experimental data for human volunteers is included for those who discount animal studies.

"       The former OSHA PEL for ozone was 0.1 ppm TWA. In the interval since this limit was adopted in 1971, the ACGIH has recommended that 15-minute short-term exposures to ozone not exceed 0.3 ppm. NIOSH has no REL for ozone. OSHA proposed, and the final rule establishes, permissible exposure limits of 0.1 ppm TWA and 0.3 ppm STEL for ozone. The Agency notes that the ACGIH has placed ozone on its 1988-89 Notice of Intended Changes and is proposing a new TLV of 0.1 ppm as a ceiling value. Ozone is a liquid or an explosive gas.

Ozone is highly injurious and lethal in experimental animals at concentrations as low as a few parts per million

(Stokinger 1957/Ex. 1-97). A study in which young mice were exposed to 1 ppm ozone for one or two days reported damage to alveolar tissue (Bils 1970/Ex. 1-58). Human populations chronically exposed to lower concentrations of ozone have been observed to have changes in lung function. In one study, human volunteers exposed to 0.5 ppm ozone for three hours per day, six days per week, for 12 weeks showed significant changes in lung function (Jaffe 1967/Ex. 1-101). Other authors reported a 20-percent reduction in timed vital capacity in persons exposed to average concentrations of ozone of 1.5 ppm (range not indicated) for two hours (Griswold, Chambers, and Motley 1957/Ex. 1-128). Welders exposed to maximal ozone concentrations of 9 ppm were observed to have pulmonary congestion (Kleinfeld and Giel 1956/Ex. 1-120). "

73, Barry L. Ornitz      WA4VZQ      ornitz@tricon.net

OSHA      - Occupational Safety and Health Administration  
PEL      - Permissible Exposure Level  
ACGIH    - American Council of Government and Industrial Hygienists  
REL      - Recommended Exposure Limit  
TWA      - Time Weighted Average  
STEL     - Short Term Exposure Limit  
TLV      - Threshold Limiting Value  
PPM      - Part Per Million (by volume)

-----  
Message-ID: <00a201bf0dd2\$99a0aac0\$c71bbfd1@MikeBFeher>  
From: "Mike Feher" <n4fs@monmouth.com>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: Ozone      was Re: Marconi  
Date: Sun, 3 Oct 1999 15:07:54 -0400  
MIME-Version: 1.0  
Content-Type: text/plain;  
              charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Barry -

Without further BS, please put this in perspective as I am sure any of us can get the information you quoted from various sources. What is the expected level of ozone that is generated from about a 1 KW spark gap keyed intermittently in an average sized room. I can understand power densities in some power unit per some cubic volume and can calculate the same from a given source, etc... I would expect the same here, not just units of PPM when I have no idea how much is generated or converted to ozone. I also expect that welders are in the close vicinity of the generator and are



exposed to long durations, daily. Again, not even close to an occasional key closure from a spark transmitter. 73 - Mike

> Ozone is highly injurious and lethal in experimental  
> animals at concentrations as low as a few parts per million  
> (Stokinger 1957/Ex. 1-97). A study in which young mice were  
> exposed to 1 ppm ozone for one or two days reported damage to  
> alveolar tissue (Bils 1970/Ex. 1-58). Human populations  
> chronically exposed to lower concentrations of ozone have been  
> observed to have changes in lung function. In one study, human  
> volunteers exposed to 0.5 ppm ozone for three hours per day, six  
> days per week, for 12 weeks showed significant changes in lung  
> function (Jaffe 1967/Ex. 1-101). Other authors reported a 20-  
> percent reduction in timed vital capacity in persons exposed to  
> average concentrations of ozone of 1.5 ppm (range not indicated)  
> for two hours (Griswold, Chambers, and Motley 1957/Ex. 1-128).  
> Welders exposed to maximal ozone concentrations of 9 ppm were  
> observed to have pulmonary congestion (Kleinfeld and Giel  
> 1956/Ex. 1-120). "

>

> 73, Barry L. Ornitz WA4VZQ ornitz@tricon.net

-----  
Message-Id: <199910040303.XAA19808@flash.naxs.net>

From: "Barry L. Ornitz" <ornitz@tricon.net>

To: Old Tube Radios <boatanchors@theporch.com>

Subject: Re: Ozone was Re: Marconi

Date: Sun, 3 Oct 1999 23:58:37 -0400

Mike Feher wrote:

>What is the expected level of ozone that is generated from about  
>a 1 KW spark gap keyed intermittently in an average sized room.

No BS, Mike - just simple factual data. The odor threshold for ozone is 0.045 PPM, about half the maximum level for continuous exposure. Since you said you smelled it, you obviously reached this level. You also noted the brightness and sound would tend to drive one from the room. This implies a much greater ozone generation than that of the spark-gap at W1AW which is tame in comparison. The ARRL unit cannot be operated for more than a few minutes a day based on ozone levels not exceeding legal limits in the room.

73, Barry WA4VZQ ornitz@tricon.net

-----  
Message-Id: <199910040430.VAA18914@mail-gw5.pacbell.net>  
From: "Arden Allen" <gumbear@pacbell.net>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: Ozone was Re: Marconi  
Date: Sun, 3 Oct 1999 21:29:36 -0700  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Mike;

> Without further BS.....

Probably not the best choice of terms as it gives the impression Barry is posting information of little use to us BAists. Not so IMO. Close your shack up tight on a winter's night and arc and spark away. If you can smell ozone you should do something to change the air continuously. That's my calibration of what

Barry says. Besides, where else can you have the free services of a practiced safety consultant?

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

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End of BOATANCHORS Digest 2689  
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